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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/963,656 11/03/97 GERARD

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EXAMINER

MERTZ, P

ART UNIT

PAPER NUMBER

1646

DATE MAILED:

14
08/04/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/963,656

Applicant(s)

Gerard et al.

Examiner

Prima Mentis

Group Art Unit

1646

--The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address--

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 6-21-99
- ☒ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 38-39, 49-51, 53, 55, 57-74 ~~is/are~~ pending in the application.
- Of the above claim(s) 59-67 ~~is/are~~ withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 38-39, 49-51, 53, 55, 57-58, 68-74 ~~is/are~~ rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____.

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of References Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

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DETAILED ACTION

1. Claims 52, 54 and 56 have been canceled in Paper No. 13, 6/21/99. Claims 57-58, amended claims 38-39, 49-51, 53 and 55, and new claims 68-74 (Paper No. 13, 6/21/99), are under consideration.
2. Receipt of applicant's arguments and amendments filed in Paper No. 13 (6/21/99) is acknowledged.
3. The following previous rejections and objections are withdrawn in light of applicants amendments filed in Paper No. 13, 6/21/99:
 - (I) the objection to the disclosure,
 - (ii) the rejection of claim 58 under 35 U.S.C. § 112, first paragraph for Requirement for the deposit of biological material,
 - (iii) the rejection of claims 38-39 under 35 U.S.C. § 112, second paragraph
 - (iv) the rejection of claims 49-52 under 35 U.S.C. 101 as being substantial duplicates of claims 53-56, respectively.
4. Applicant's arguments filed in Paper No. 13 (6/21/99), have been fully considered but were deemed persuasive in part. The issues remaining and new issues, are stated below.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

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6. Claims 49 and 53 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This rejection is maintained for reasons of record set forth at pages 4-5 of the previous Office action (Paper No. 9, 12/16/98).

Applicants argue that the specification discloses that the approaches described in the application for isolation and manipulation of the genomic and cDNAs of human CCR3, for construction of vectors and host strains and for production and use of the receptor and fragments thereof can be applied to other mammalian species and have cited page 28-29 in this regard. However, contrary to Applicants arguments, the instant specification does not disclose the amino acid sequences for the other mammalian CKR3 receptors i.e. bovine, ovine, porcine, equine, feline, etc. with respect to the disclosure of relevant identifying characteristics i.e. structure, other physical and/or chemical characteristics or combination of such characteristics. The description for mammalian CKR3 receptors is limited to their function, and to a method for isolating the claimed sequence from its natural source. A sequence described only by a purely functional characteristic, without any known or disclosed correlation between that function and the structure of the sequence, is not a sufficient identifying characteristic for written description purposes, even when accompanied by a method of obtaining the claimed species. In this case, even though a genetic code table would correlate the human CKR3 amino acid sequence with a genus of coding nucleic acids, the same table cannot

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predict the native, naturally occurring nucleic acid sequence of feline or canine mRNA or its corresponding cDNA and protein sequence. Thus, at the time the application was filed, antibodies to mammalian CKR3 was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention.

Claim rejections-35 USC § 112

7. Claims 38-39, 49-51, 53, 55, 57-58, 68-74 are rejected under 35 U.S.C. 112, first paragraph.

This rejection is maintained for reasons of record set forth at pages 5-10 of the previous office action (Paper No. 9, 12/16/98).

Applicants argue that claims 38, 49 and 53 have been amended to refer to “naturally-occurring” mammalian C-C chemokine receptor 3 protein and to delete reference to portions of the receptor and that the specification is clearly enabling for antibodies reactive with these proteins. However, contrary to Applicants arguments, the specification delimits the instant protein by reference to specific amino acid arrays as set forth in SEQ ID NO:2 and SEQ ID NO:4, however, in the claims, the protein is defined by reference to the abbreviation C-C chemokine receptor 3 protein, wherein the abbreviation itself does not represent any distinguishing information concerning the disclosed protein. Moreover because C-C chemokine receptor 3 protein does not inherently correspond to any particular chemokine receptor protein, claims that lack the recitation of structural properties encompass subject matter not supported by the instant specification. Molecules that are embraced by the claims are not adequately supported by the instant specification because the specification provides no guidance for how to make such molecules nor are examples provided as to how these molecules would be

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identified commensurate with the breadth of the claims. In the absence of an appropriate structural and/or functional reference, a person of ordinary skill in the art would be unable to make and use the antibody molecules embraced by the claims without undue experimentation because one could not distinguish the chemokine receptor proteins envisaged by the specification and those which are unrelated.

Claim Rejections - 35 USC § 103

8. Claims 38-39 and 49-50, 70-71 are rejected under 35 U.S.C. § 103 as being unpatentable over Yamagami et al. (1994) in view of Lerner (1982) and Harlow et al. (1988).

Applicants argue that Yamagami et al do not teach or suggest an antibody or antigen binding fragment thereof which binds to a mammalian CCR3 protein or portion thereof, Yamagami et al. Do not teach or suggest an antibody or antigen binding fragment which inhibits binding of a ligand to the receptor and inhibits function associated with binding of the ligand to the receptor and that the stretch of 10 amino acids which the Examiner has identified as being identical with a portion of the amino acid sequence depicted in SEQ ID NO:2 of the present application is an amino acid motif which is highly conserved among C-C and C-X-C chemokine receptors and will not specifically bind to CCR3 in accordance with Applicants' claimed invention. However, contrary to Applicants arguments, the stretch of 10 amino acids identified by the Examiner is exemplary since there are many other regions of identity (53.4%) between the instant chemokine receptor polypeptide and the MCP-1RB receptor polypeptide of the prior art. An antibody to the MCP-1RB receptor polypeptide of the prior art would certainly bind to the instant chemokine receptor polypeptide and inhibit function associated with

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binding of the ligand to the receptor, in fact it would be difficult to make an antibody that did not bind to both the receptors. Since an antibody to the MCP-1RB receptor of the prior art would undoubtedly, specifically bind the CCR3 receptor protein of the instant application, the prior art references render the instant claims obvious.

Conclusion

No claim is allowed.

Advisory Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prema Mertz whose telephone number is (703) 308-4229. The examiner can normally be reached on Monday-Friday from 8:00AM to 4:30PM (Eastern time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Hutzell, can be reached on (703) 308-4310.

Official papers filed by fax should be directed to (703) 308-4242. Faxed draft or informal communications with the examiner should be directed to (703) 308-0294.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Prema Mertz
Prema Mertz Ph.D.
Primary Examiner
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July 7, 1999